

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
REGION 9, SAN DIEGO REGION**

**WASTE DISCHARGE REQUIREMENTS
ORDER NO. R9-2005-0091
NPDES PERMIT NO. CA0107336**

The Discharger listed in *Table 1. Discharger*, shall comply with the conditions and prohibitions set forth in this Order.

Table 1. Discharger.

Discharger	Anheuser-Busch, Inc.
Name of Facility	SeaWorld, San Diego
Facility Address	500 Sea World Drive
	San Diego, CA 92109
	San Diego County

The conditions and prohibitions established in this Order are applicable to the discharge from the discharge points listed in *Table 2. Discharge Locations*.

Table 2. Discharge Locations.

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	East treatment system effluent	32° 46' 03" N	117° 13' 33" W	Mission Bay
002	West treatment system effluent	32° 46' 04" N	117° 13' 40" W	Mission Bay

The adoption date, effective date, and expiration date for this Order are listed in *Table 3. Order Information*.

Table 3. Order Information.

This Order was adopted by the Regional Board on:	April 13, 2005
This Order shall become effective on:	April 23, 2005
This Order shall expire on:	April 13, 2010
The U.S. Environmental Protection Agency (U.S. EPA) and the Regional Board have classified this discharge as a major discharge.	
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, <u>not later than October 15, 2009</u> as application for issuance of new waste discharge requirements.	

IT IS HEREBY ORDERED, that Order No. 2000-25 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the CWC and regulations adopted thereunder, and the provisions of the federal CWA, and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements herein.

I, John H. Robertus, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on April 13, 2005.

Tentative
JOHN H. ROBERTUS, Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
REGION 9, SAN DIEGO REGION**

**ORDER NO. R9-2005-0091
NPDES NO. CA0107336**

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I. FACILITY INFORMATION

The following Discharger listed in *Table 4. Facility Information*, is regulated pursuant to the conditions set forth in this Order.

Table 4. Facility Information

Discharger	Anheuser-Busch, Inc.
Name of Facility	SeaWorld San Diego
Facility Address	500 Sea World Drive
	San Diego, CA 92102
	San Diego County
Facility Contact, Title, and Phone	Kevin Carr, Environmental Director, (619) 226-3934
Mailing Address	500 Sea World Drive
Type of Facility	Amusement Park
Facility Design Flow	9.36 million gallons per day

II. FINDINGS

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds:

- A. Background.** Anheuser-Busch, Inc. (hereinafter Discharger) is currently discharging pursuant to Order No. 2000-25 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0107336. The Discharger submitted a Report of Waste Discharge dated November 19, 2004, and applied for an NPDES permit renewal to discharge up to 9.36 million gallons per day (mgd) of treated wastewater from SeaWorld San Diego.
- B. Facility Description.** The Discharger owns and operates an aquatic amusement park that houses various marine animals. The Discharger proposes to discharge up to 9.36 MGD of wastewater from exhibit pools, intermittent flows during pool draining and cleaning operations, runoff from landscape irrigation, facility wash down water. Storm water is discharged from the facility during rain events. The Discharger pumps seawater from Mission Bay through 2 intake structures (East and West) for use in its mammal pools, aquaria, and other exhibits. Prior to discharge into Mission Bay, the effluent is directed to one of two treatment systems operated by the Discharger. The East and West Effluent Treatment facilities are chlorination/dechlorination treatment systems. The wastewater is filtered via 1" screens, and diversion chambers transfer the water to chlorine contact chambers. Sodium hypochlorite is injected at three prechlorination points in each collection system prior to the contact chamber. A final sodium hypochlorite injection point is located just prior to the contact chamber. Residual chlorine is neutralized prior to discharge to Mission Bay by the injection of sodium bisulfate (West side) or sodium sulfate (East side). The combined treated wastewater is discharged to Mission Bay through two outfalls. Outfall

No. 001 (East) has a maximum discharge rate of 3.24 MGD and is located at 32° 46' 03" North latitude and 117° 13' 33" Seconds West longitude. Outfall No. 002 (West) has a maximum discharge rate of 6.12 MGD and is located at 32° 46' 04" North latitude and 117° 13' 40" West longitude.

- C. **Legal Authorities.** This Order is issued pursuant to section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). This Order is the NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements pursuant to Article 4, Chapter 4 of the CWC for discharges that are not subject to regulation under CWA section 402.
- D. **Background and Rationale for Requirements.** This Regional Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and through special studies. Attachments A through J contain background information and detailed rationale for Order requirements and are hereby incorporated into this Order and, thus, constitute part of the Findings for this Order.
- E. **California Environmental Quality Act (CEQA).** According to Section 13389 of the CWC, this permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.)
- F. **Technology-based Effluent Limitations.** The Code of Federal Regulations (CFR) at 40 CFR §122.44(a) requires that permits include applicable technology-based limitations and standards. No technology-based effluent limitations exist for this discharge or similar discharges. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- G. **Threat to Water Quality and Complexity.** Pursuant to Title 23, Division 3, Chapter 9, Article 1, Section 2200 of the California Code of Regulations (CCR), this Regional Board has assigned a Threat to Water Quality (TTWQ) and Complexity (CPLX) to the Discharger. The Discharger is assigned a TTWQ of Category 2, and a CPLX of Category A.
- H. **Water Quality-based Effluent Limitations.** Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBEL) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where numeric water quality objectives have not been established, 40 CFR §122.44(d) specifies that WQBEL may be established using USEPA criteria guidance under CWA section 304(a), proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter.

The 2002 State Water Resource control Board's (State Board) California 303(d) list classifies Mission Bay as impaired because of bacteria, lead and eutrophication. Currently there is no proposed date for the TMDL completion for any of these pollutants in the receiving water body. Upon the completion of the TMDLs for Mission Bay, this Regional Board may re-open this Order to include TMDL allocations.

The Discharger chlorinates and dechlorinates the effluent prior to discharge to Mission Bay. It is unlikely the Discharger will contribute to the impairment of the water body for bacteria indicators. The Discharger conducted an eutrophication study during 2000 – 2001 and concluded that the effluent from the Facility is not causing or contributing to eutrophication in Mission Bay. Available effluent data does not indicate that the Discharger will contribute to the impairment of the receiving water for lead.

- I. **Water Quality Regional Control Plans.** The Regional Board adopted a Water Quality Control Plan for the San Diego Region [hereinafter Basin Plan] on September 8, 1994. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Beneficial uses applicable to Mission Bay are listed in *Table 5. Beneficial Uses of Mission Bay*.

Table 5. Beneficial Uses of Mission Bay.

Outfall Number	Receiving Water Name	Beneficial Use(s)
001 and 002	Mission Bay	<p><u>Existing:</u></p> <p>Industrial Services Supply (IND)</p> <p>Contact Water Recreation (REC1)</p> <p>Non-contact Water Recreation (REC2)</p> <p>Commercial and Sport Fishing (COMM)</p> <p>Estuarine Habitat (EST)</p> <p>Rare, Threatened, or Endangered Species (RARE)</p> <p>Marine Habitat (MAR)</p> <p>Migration of Aquatic Organisms (MIGR)</p> <p>Wildlife Habitat (WILD)</p> <p>Shellfish Harvesting (SHELL)</p> <p><u>Intermittent:</u></p> <p>None.</p> <p><u>Potential:</u></p> <p>None.</p>

The State Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters and enclosed bays and estuaries.

Requirements of this Order specifically implement the applicable Water Quality Control Plans.

- J. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** U.S. EPA adopted the *National Toxics Rule* (NTR) on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the *California Toxics Rule* (CTR) on May 18, 2000, which was

amended on February 13, 2001. These Rules contain water quality standards for priority pollutants applicable to this discharge.

- K. **State Implementation Policy.** On March 2, 2000, The State Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). On April 28, 2000, the SIP became effective for regulating discharges of priority pollutant criteria promulgated for California by the U.S. EPA through National Toxics Rule (NTR) and for priority pollutant objectives established by the Regional Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the U.S. EPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. On May 18, 2000, the SIP became effective for regulating priority pollutant criteria promulgated by the U.S. EPA through the CTR.
- L. **Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a discharger's request and demonstration that it is infeasible for an existing discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under Section 5.3 of the SIP, a compliance schedule may not exceed five years from the date that the permit is issued or reissued nor may it extend beyond ten years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the permit must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does not include compliance schedules and interim effluent limitations or discharge specifications.
- L. **Antidegradation Policy.** Pursuant to 40 CFR 131.12 the State water quality standards must include an anti-degradation policy consistent with the Federal policy. The State Board established California's anti-degradation policy in State Board Resolution No. 68-16, which incorporates the requirements of the Federal anti-degradation policy. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified. The permitted discharge complies with the anti-degradation provision of 40 CFR 131.12 and State Board Resolution No. 68-16.
- M. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the Clean Water Act (CWA) and federal regulations at 40 CFR §122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the current permit, with some exceptions where limitations may be relaxed. Based on new data provided by the Discharger, an effluent limitation for halomethanes has not been continued from the current permit. The removal of the effluent limitation for halomethanes is in compliance with all State and Federal Anti-Backsliding requirements. All other effluent limitations contained in this Order are as stringent as the effluent limitations in the current Order.

- N. **Monitoring and Reporting.** Section 122.48 of 40 CFR requires all NPDES permits to specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Boards to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- M. **Standard and Special Provisions.** According to 40 CFR 122.41 and 122.42, Standard Provisions apply to all NPDES discharges and must be included in every NPDES permit. Standard Provisions are provided in Attachment D to this Order. This Regional Board has also included in this Order special provisions applicable to the Discharger. A detailed rationale for the special provisions contained in this Order is provided in the attached Fact Sheet (Attachment F).
- O. **Notification of Interested Parties.** This Regional Board has notified the discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- P. **Consideration of Public Comment.** This Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

III. DISCHARGE PROHIBITIONS

- A. Compliance with Discharge Prohibitions contained in the Basin Plan is a requirement of this Order.
- B. Discharges of waste in a manner or to a location which have not been specifically authorized by this Order and for which valid waste discharge requirements are not in force are prohibited.
- C. Aquaria and pool draining operations are prohibited upon the commencement of a storm event. The discharge must minimize the use of the storm water by-passes at Outfall Nos. 001 and 002.
- D. The discharge of wastewater and storm water in excess of the effluent limitations in Section IV.A.1. of this Order are prohibited unless the Discharger obtains revised waste discharge requirements authorizing an increased discharge.
- E. The discharge shall not cause pollution, contamination, or nuisance, as those terms are defined in CWC 13050, as a result of the treatment or discharge of wastes.
- F. Collected screenings, sludges, and other solids removed from liquid wastes, shall be disposed of in a manner which complies with local, state and federal statutes and regulations.

G. Odors, vectors, and other nuisances of waste origin beyond the limits of the property controlled by discharger are prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Outfall No. 001 (East Outfall)

1. Effluent Limitations

- a. The discharge of wastewater from exhibit pools, intermittent flows during pool draining and cleaning operations, runoff from landscape irrigation, facility wash down water, and storm water from Outfall No. 001 shall maintain compliance with the effluent limitations listed in *Table 6. Effluent Limitations for Outfall No. 001.*

Table 6. Effluent Limitations for Outfall No. 001.

Parameter	Units	Effluent Limitations				
		6 Month Median	Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	--	--	3.24	--	--
pH	Units	--	--	--	7.0	9.0
Oil and Grease	mg/L	--	25	--	--	75
	lbs/day ¹	--	676	--	--	2,026
Turbidity	NTU	--	75	--	--	225
Settleable Solids	ml/L	--	1.0	--	--	3.0
Suspended Solids	mg/L	Narrative ²				
Ammonia	mg/L	--	--	--	--	0.55
	lbs/day ¹	--	--	--	--	15
Chlorine Residual	mg/L	--	0.21	--	--	0.42
	lbs/day ¹	--	5.7	--	--	11.3
Copper ³	µg/L	24	38.13	76.5	--	--
	lbs/day ¹	0.65	1.0	2.1	--	--
Silver ³	µg/L	6.5	23.16	36	--	--
	lbs/day ¹	0.2	0.6	1.0	--	--
Enterococcus	CFU/100 mL	--	35	--	--	104
Fecal Coliform	MPN/100 mL	Narrative ⁴				
Total Coliform	MPN/100 mL	Narrative ⁵				
Acute Toxicity	TUa	--	1.5	--	--	2.5
Chronic Toxicity	TUc	--	--	22	--	--

¹ Mass-based effluent limitations have been calculated based on a maximum flow value of 3.24 MGD.

- 2 The discharge of aquaria wastewater through Outfall No. 001 shall contain no increase in excess of 10 mg/L for a monthly average or 15 mg/L for a daily maximum in the concentration of total suspended solids when compared to the intake water.
 - 3 Metals are expressed as total recoverable.
 - 4 The fecal coliform concentration based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200/100 mL, nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 mL.
 - 5 The median total coliform concentration throughout the water column for any 30-day period shall not exceed 70/100 mL nor shall more than 10 percent of the samples collected during any 30-day period exceed 230/100 mL for a five-tube decimal dilution test or 330/100 mL when a three tube dilution test is used.
- b. The discharge of wastewater from exhibit pools, intermittent flows during pool draining and cleaning operations, runoff from landscape irrigation, facility wash down water, and storm water from Outfall No. 002 shall maintain compliance with the effluent limitations summarized in *Table 7. Final Effluent Limitations for Outfall No. 002 table.*

Table 7. Effluent Limitations for Outfall No. 002.

Parameter	Units	Effluent Limitations				
		6 Month Median	Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	--	--	6.12	--	--
pH	Units	--	--	--	7.0	9.0
Oil and Grease	mg/L	--	25	--	--	75
	lbs/day ¹	--	1,276	--	--	3,828
Turbidity	NTU	--	75	--	--	225
Settleable Solids	ml/L	--	1.0	--	--	3.0
Suspended Solids	mg/L	Narrative ²				
Ammonia	mg/L	--	--	--	--	0.55
	lbs/day ¹	--	--	--	--	28.1
Chlorine Residual	mg/L	--	0.21	--	--	0.42
	lbs/day ¹	--	10.7	--	--	21.4
Copper ³	µg/L	24	38.13	76.5	--	--
	lbs/day ¹	1.2	1.9	3.9	--	--
Silver ³	µg/L	6.5	23.16	36	--	--
	lbs/day ¹	0.33	1.2	1.8	--	--
Enterococcus	CFU/100 mL	--	35	--	--	104
Fecal Coliform	MPN/100 mL	Narrative ⁴				
Total Coliform	MPN/100 mL	Narrative ⁵				
Acute Toxicity	TUa	--	1.5	--	--	2.5
Chronic Toxicity	TUc	--	--	22	--	--

¹ Mass-based effluent limitations have been calculated based on a maximum flow value of 3.24 MGD.

- 2 The discharge of aquaria wastewater through Outfall No. 002 shall contain no increase in excess of 10 mg/L for a monthly average or 15 mg/L for a daily maximum in the concentration of total suspended solids when compared to the intake water.
- 3 Metals are expressed as total recoverable.
- 4 The fecal coliform concentration based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200/100 mL, nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 mL.
- 5 The median total coliform concentration throughout the water column for any 30-day period shall not exceed 70/100 mL nor shall more than 10 percent of the samples collected during any 30-day period exceed 230/100 mL for a five-tube decimal dilution test or 330/100 mL when a three tube dilution test is used.

2. Interim Effluent Limitations (Not Applicable)

V. LAND DISCHARGE SPECIFICATIONS (NOT APPLICABLE)

VI. RECLAMATION SPECIFICATIONS (NOT APPLICABLE)

VII. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this Order. The discharge shall not cause the following in Mission Bay:

1. Physical Characteristics

- a. In bays and estuaries, the most probable number of coliform organisms in the upper 60 feet of the water column shall be less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 (100 per ml).
- b. Waters designated for contact recreation (REC-1) beneficial use shall not exceed the values specified in the U.S. EPA Bacteriological Criteria For Water Contact Recreation, designated for contact recreation in the Federal Register, Volume 51, No. 45, Friday, March 7, 1986, 8012-8016.
- c. Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses. The natural color of fish, shellfish or other resources in inland surface waters, coastal lagoon or bay and estuary shall not be impaired.
- d. Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.

- e. Waters shall not contain oils, greases, waxes, or other materials in concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or which otherwise adversely affect beneficial uses.
- f. The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
- g. Waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.
- h. Waters shall not contain taste or odor producing substances at concentrations which cause a nuisance or adversely affect beneficial uses. The natural taste and odor of fish, shellfish or other Regional water resources used for human consumption shall not be impaired in inland surface waters and bays and estuaries.
- i. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

The transparency of waters in lagoons and estuaries shall not be less than 50% of the depth at locations where measurement is made by means of a standard Secchi disk, except where lesser transparency is caused by rainfall runoff from undisturbed natural areas and dredging projects conducted in conformance with waste discharge requirements of the Regional Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not exceed: 20% over natural turbidity levels at locations with a natural turbidity of 0 to 50 NTU; 10 NTU at locations with a natural turbidity of 50 to 100 NTU; and 10% over the natural turbidity level in locations with a natural turbidity of greater than 100 NTU.

2. Chemical Characteristics

- a. The discharge of wastes shall not cause the concentrations of un-ionized ammonia (NH_3) to exceed 0.025 mg/L (as N).
- b. Inland surface waters, bays and estuaries and coastal lagoon waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.
- c. Changes in normal ambient pH levels shall not exceed 0.2 units in waters designated estuarine beneficial uses. In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0.

3. Radioactivity

- a. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal or aquatic life.

4. Toxicity

- a. All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
- b. Inland surface waters, enclosed bays, and estuaries shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.38.

5. Pesticides

- a. No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentrations(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms.

VIII. GROUNDWATER LIMITATIONS (NOT APPLICABLE)

IX. PROVISIONS

A. Standard Provisions

The Discharger shall comply with the Federal and Regional Board Standard Provisions contained in this section. A more detailed description of the Federal Standard Provisions are included in Attachment D of this Order. In cases where the Standard Provisions contained within this section and the Standard Provisions conflict, the more stringent of the two requirements apply.

- 1. **Federal Standard Provisions.** The following sections of 40 CFR are incorporated into this permit by reference and are included in Attachment D to this Order:
 - a. 122.5 *Effect of a permit*
 - b. 122.21 *Application for a permit*
 - c. 122.22 *Signatories to permit applications and reports*
 - d. 122.41 *Conditions applicable to all permits*
 - e. 122.61 *Transfer of permits*
 - f. 122.62 *Modification or revocation of permits*
 - g. 122.63 *Minor modifications of permits*

- h. 122.64 *Termination of permits*
2. **Regional Board Standard Provisions.** The Discharger shall comply with the following provisions:
- a. Neither the treatment nor the discharge of waste shall create a pollution, contamination, or nuisance as defined by Section 13050 of the California Water Code.
 - b. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
 - c. Upon application by any affected person, or on its own motion, the Regional Board may review and revise this permit.
 - d. The discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
 - e. The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the CWA.
- Nothing in this Order shall protect the discharger from its liabilities under federal, state, or local laws. Except as provided for in 40 CFR 122.41(m) and (n), nothing in this Order shall be construed to relieve the discharger from civil or criminal penalties for noncompliance.
- Nothing in this Order shall preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties to which the discharger is or may be subject to under Section 311 of the CWA.
- Nothing in this Order shall preclude institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authoring preserved by Section 510 of the CWA.
- f. Any noncompliance with this permit is a violation of the California Water Code and/or the federal Clean Water Act and is grounds for denial of an application for permit modification.
 - g. No discharge of waste into waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights.

- h. For the purposes of this permit, the term “permittee” used in parts of 40 CFR incorporated into this permit by reference and/or applicable to this permit shall have the same meaning as the term “discharger” used elsewhere in this permit.
- i. After this permit expires, the terms and conditions of this permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on the continuation of expired permits are complied with.
- j. Any application submitted by the discharger for reissuance or modification of this permit shall satisfy all applicable requirements specified in federal regulations as well as any additional requirements for submittal of a Report of Waste Discharge specified in the California Water Code and the California Code of Regulations.
- k. Except as provided for in 40 CFR 122.7, no information or documents submitted in accordance with or in application for this permit will be considered confidential, and all such information and documents shall be available for review by the public at the office of the Regional Board.
- l. The discharger shall conduct appropriate analyses on any sample provided by U.S. EPA as part of the discharge monitoring quality assurance (DMQA) program. The results of such analyses shall be submitted to U.S. EPA’s DMQA manager.
- m. The handling, transport, treatment, or disposal of waste or the discharge of waste to waters of the state in a manner, which causes or threatens to cause a condition of pollution, contamination, or nuisance, as those terms are defined in CWC 13050, is prohibited.
- n. The discharger shall comply with any interim effluent limitations as established by addendum, enforcement action or revised waste discharge requirements, which have been or may be adopted by this Regional Board.
- o. A copy of this Order shall be maintained on-site at the facility, and shall be available to operating personnel at all times.
- p. This Order shall become effective 10 days after the date of its adoption, provided the U.S. EPA Regional Administrator has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.
- q. **This Order expires on April 13, 2010.** However, it will continue in force and effect until superseded by a new permit or rescinded.
- r. This Order does not apply to discharges of radioactive materials regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.).

X. MONITORING AND REPORTING PROGRAM REQUIREMENTS

1. This Order expires on **April 13, 2010**. If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain new waste discharge requirements. The Discharger must file a complete Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date, as an application for issuance of new waste discharge requirements.
2. The discharger shall comply with Monitoring and Reporting Program No. R9-2005-0091 (Attachment E), and future revisions thereto.

Monitoring data shall be submitted on a copy of the Monitoring and Reporting Form included Attachment G, Monitoring and Reporting Form.

Reports required to be submitted to this Regional Board shall be sent to:

Industrial Compliance Unit
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, California 92123-4340

Notifications required to be provided to this Regional Board shall be made to:

Telephone - (858) 467-2952 or
Facsimile - (858) 571-6972

3. The Discharger, after notification by the State or Regional Board, may be required to electronically submit self-monitoring reports. Until such time as electronic submission of self monitoring reports is required, the Discharger shall submit discharge monitoring reports (DMRs) in accordance with the requirements described further below.

DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharge shall submit the original DMR and one copy to:

State Water Resources Control Board
Discharge Monitoring Report Processing Center
Post Office Box 671
Sacramento, CA 95812

All discharge monitoring results must be reported on the official U.S. EPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self generated or modified cannot be accepted.

XI. SPECIAL PROVISIONS

1. Re-opener Provisions

- a. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
 - i. Violation of any terms or conditions of this Order;
 - ii. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts;
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the discharger for modifications, revocation and reissuance, or termination of this Order, or a notification of planned change in or anticipated noncompliance with this Order does not stay any condition of this Order.

- b. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Regional Board may institute proceedings under these regulations to modify or revoke and reissue the Order to conform to the toxic effluent standard or prohibition.
- c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach.
- d. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include new Minimum Levels (ML).
- e. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, or the adoption of a total maximum daily load allocation (TMDL) for Mission Bay.
- f. This Order may be reopened upon submission by the Discharger of adequate information, as determined by this Regional Board, to provide for dilution credits or a mixing zone, as may be appropriate.
- g. This Order may be reopened and modified to revise the toxicity language once that language becomes standardized.
- h. This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to,

failure to comply with any condition of this Order and permit, and endangerment to human health or the environment resulting from the permitted activity.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. The Discharger shall participate and coordinate with state and local agencies and other dischargers in the San Diego Region in development and implementation of a regional monitoring program for Mission Bay as directed by this Regional Board. The intent of a regional monitoring program is to maximize the efforts of all monitoring partners using a more cost-effective monitoring design and to best utilize the pooled resources of the region. During a coordinated sampling effort, the Discharger's sampling and analytical effort may be reallocated to provide a regional assessment of the impact of discharges to the receiving water.
- b. The Discharger shall conduct CTR monitoring once during the term of the permit as established in Section IV.A. of the MRP. Monitoring shall be conducted between February 1, 2009 and July 31, 2009. The results of this CTR monitoring data shall be submitted at least 180 days prior to the expiration date of this Order and shall be submitted with the Report of Waste Discharge.
- c. Because storm water may mix or commingle with other waste waters, and because the Discharger conducts chlorination at various locations throughout the storm water/wastewater collection system, the Discharger shall conduct sampling of storm water by-passes from the Facility to evaluate the presence of potential pollutants. Within two years after the adoption date of Order No. R9-2005-0091, the Discharger shall conduct two monitoring events of the storm water by-pass discharge points during active storm water by-passes. Sampling shall be conducted at representative storm water discharge locations during normal operational hours. The results of the storm water by-pass monitoring shall be submitted to this Regional Board no later than 90 days following the second sampling event. The Discharger shall collect grab samples for all pollutants specified in Section IX.D. of the MRP.

3. Best Management Practices and Pollution Prevention

a. Best Management Practices Plan.

The Discharger shall establish and implement a best management practices (BMP) plan to reduce pollution to Mission Bay and minimize pollutants contact with storm water. The best management practices shall be continued from the current Order. The following BMPs shall be conducted to maximize capture and treatment of any wastewater, and reduce or eliminate any mixing with storm water:

- i. Aquaria and pool draining activities shall be halted upon commencement of a storm event.

- ii. All paved areas shall be swept down periodically to minimize storm water pollutant loading into Mission Bay.
 - iii. A periodic wash down following the periodic sweep is authorized. Care shall be taken to direct as much of the wash down as possible into the treatment system.
- b. Within one year after the adoption of this Order, the Discharger shall develop and implement the Storm Water Pollution Prevention Plan (SWPPP) Requirements as specified in Attachment I of Order No. R9-2005-0091. The SWPPP shall incorporate the BMPs established in Section XI.3.a. of this Order.

4. Compliance Schedules (Not Applicable)

5. Construction, Operation and Maintenance Specifications (Not Applicable)

6. Special Provisions for Municipal Facilities (POTWs Only) (Not Applicable)

7. Other Special Provisions

XII. COMPLIANCE DETERMINATION

Compliance with effluent limitations or discharge specifications shall be determined as follows:

1. If only one sample is collected during the time period associated with the effluent limitations (e.g., 30-day average or 6-month median), the single measurement shall be used to determine compliance with the effluent limitation for the entire time period.
2. Analytical data shall be reported uncensored with detection limits and quantitation limits identified. For any effluent limitation, compliance shall be determined using appropriate statistical methods to evaluate multiple samples. Sufficient sampling and analyses shall be conducted to determine compliance.
3. Calculations for limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this Order or Monitoring and Reporting Program No. R9-2005-0091.
4. When determining compliance based on a single sample, with a single effluent limitation which applies to a group of chemicals (e.g. PCBs) concentrations of individual members of the group may be considered to be zero if the analytical response for individual chemicals falls below the MDL for that parameter.
5. The 6-month median effluent concentration limitation shall apply as a moving median of daily values for any 180-day period in which daily values represent flow-weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred. The 6-month median receiving water limitation shall apply as a moving median of daily values for any 180-day period.

6. Average monthly discharge limitation means the highest allowable average concentration over a running 30-day period, calculated as the sum of all measured concentrations during a 30-day period divided by the number of measured concentrations during that period.
7. Average weekly discharge limitation means the highest allowable average of concentration over a running 7-day period, calculated as the sum of all measured concentrations during a running 7-day period divided by the number of measured concentrations during that period.
8. The daily maximum effluent concentration limitation shall apply to grab samples. The daily maximum receiving water limitation shall apply to grab sample determinations.
9. The instantaneous maximum effluent concentration limitation shall apply to grab sample. The instantaneous maximum receiving water limitation shall apply to grab sample.
10. The mass emission rate (MER), in pounds per day, shall be obtained from the following calculation for any calendar day:

$$\text{mass emission rate (lb/Day)} = 8.34 \times Q \times C$$

In which Q and C are the flow rate in million gallons per day and the constituent concentration in mg/L, respectively, and 8.34 is a conversion factor. If a composite sample is taken, then C is the concentration measured in the composite sample and Q is the average flow rate occurring during the period over which the samples are composited.

11. Compliance with the acute toxicity limitation shall be determined using the following formula:

$$TU_a = \frac{100}{96 - hr LC 50\%}$$

Where Lethal Concentration 50% (LC 50) (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard marine test species as specified in Appendix III, Chapter II of the 2001 Ocean Plan. If specific identifiable substances in wastewater can be demonstrated by the Discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

Where it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TU_a = \frac{\log (100 - S)}{1.7}$$

Where: S = percent survival in 100 % waste. If S > 99, TUa shall be reported as zero

12. Compliance with the Chronic Toxicity effluent limitation established in the Final Effluent Limitations for Outfall Nos. 001 and 002 (section IV.A.1. of this Order) shall be determined using critical life stage toxicity tests in accordance with procedures prescribed by the Ocean Plan (2001) and restated in MRP R9-2005-0091. Chronic Toxicity (TUc) shall be expressed as Toxic Units Chronic (TUc), where:

$$TUc = 100 / NOEL$$

where NOEL is the No Observed Effect Level and is expressed as the maximum percent of effluent that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed below.

13. The discharger shall develop a Toxicity Reduction Evaluation (TRE) workplan in accordance with the TRE procedures established by the U.S. EPA in the following guidance manuals:
- a. Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070)
 - b. Toxicity Identification Evaluation, Phase I (EPA/600/6-91/005F)
 - c. Methods for Aquatic Toxicity Identification Evaluations, Phase II (EPA/600/R-92/080)
 - d. Methods for Aquatic Toxicity Identification Evaluations, Phase III (EPA/600/R-92/081)

The Discharger shall submit the TRE workplan to the Regional Board within 180 days of the adoption of this Order. The TRE workplan shall be subject to the approval of the Regional Board and shall be modified as directed by the Regional Board.

14. If toxicity effluent limitations identified in Discharge Specification IV.A.1 of this Order are exceeded, then within 15 days of the exceedance, the discharger shall begin conducting six additional toxicity tests over a six month (at least one sample per calendar month) period and provide the results to the Regional Board. The additional monthly toxicity tests will be incorporated into the semiannual discharge monitoring reports submitted pursuant to MRP No. R9-2005-0091.

If the additional monthly tests indicate that toxicity effluent limitations are being consistently violated (at least three exceedances out of the six tests), the Regional Board may recommend that the discharger conduct a TRE and a Toxic Identification Evaluation (TIE), as identified in the approved TRE workplan.

If the Discharger conducts the TRE/TIE, the Discharger shall, within 15 days of completion of the TRE/TIE, submit the results of the TRE/TIE, including a summary of findings, identified sources of toxicity, a list of corrective actions necessary to achieve consistent

compliance with all the toxicity limitations of this Order and prevent recurrence of violations of those limitations and a time schedule for implementations of such corrective actions. The corrective actions and time schedule shall be modified at the direction of the Regional Board.

15. Dischargers are out of compliance with an effluent limitation or discharge specification if the concentration of the constituent in the monitoring sample is greater than the effluent limitation or discharge specification and greater than or equal to the Minimum Level (ML).